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555 West Fifth Street  
Los Angeles, CA 90013-1010

EXAMINER

GOLDBERG, JEANINE ANNE

ART UNIT	PAPER NUMBER
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1655

DATE MAILED: 01/25/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/898,779

Applicant(s)

TAYLOR ET AL.

Examiner

Jeanine A Goldberg

Art Unit

1655

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

## Status

- 1) ☒ Responsive to communication(s) filed on 7/3/01.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 82-86, 89, 91-93, 95-102 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 82-86, 89, 91-93 and 95-102 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some \* c) ☐ None of the CERTIFIED copies of the priority documents have been:
1. ☐ received.
2. ☐ received in Application No. (Series Code / Serial Number) \_\_\_\_\_.
3. ☐ received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. & 119(e).

## Attachment(s)

- 14) ☒ Notice of References Cited (PTO-892)
- 15) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 16) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.

- 17) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 18) ☐ Notice of Informal Patent Application (PTO-152)
- 19) ☐ Other: \_\_\_\_\_.

Art Unit: 1655

### **DETAILED ACTION**

1. Claims 82-86, 89, 91-93, 95-102 are pending in the instant case.

#### ***Priority***

2. This application filed under former 37 CFR 1.60 lacks the necessary reference to the prior application. The current status of all nonprovisional parent applications referenced should be included.

#### ***Specification***

3. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: Oligonucleotide primer sequences, primer sets and genetic testing kits for lipoprotein lipase gene.

#### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 97-102 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

A) Claims 97-102 are indefinite over the recitation "the Nickerson reference sequence" or "the Oka reference sequence". Each of these recitations lack antecedent

Art Unit: 1655

basis. Furthermore, it is unclear what sequences are required by the claims. It is inevitable that Nickerson has provided more than one sequence.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 98 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gotoda (Journal of Lipid Res. Vol. 33, no. 7, pg. 1067-1072, 1992) in view of Stratagene (Catalog 1988).

It is noted, with regard to the limitation that the kits contain instructions for detection of a predisposition for non-responsiveness to treatment with a statin drug, the inclusion of instructions is not considered to provide a patentable limitation on the claims because the instructions merely represent a statement of intended use in the form of instructions in a kit.

Gotoda et al. (herein referred to as Gotoda) teaches three DNA polymorphisms in the human lipoprotein lipase gene. Within intron 8, a T-G transversion occurs within a Hind II site. Gotoda also teaches Primer E and Primer F which function to amplify Intron 8. Primer E and Primer F and provided in Table 1 amplify intron 8. Primers C and D amplify intron 6. Primer D of Gotoda overlaps SEQ ID NO: 92 of the instant

Art Unit: 1655

application. Primer D of Gotoda is located at positions 4641-4661. Primer of SEQ ID NO: 92 is located at positions 4647-4667. These primers share 14 nucleotides in common. Similarly, primers 82, 86, 88, 90 of the instant application overlap with Primer D of Gotoda.

Gotoda does not specifically teach a genetic testing kit with primers which overlap the sequences of SEQ ID NO: 82, 86, 88, 90 or 92 with respect to its position on Nickerson.

However, Stratagene teaches gene characterization kits which help explore identified gene. The kits provide reagents which have been assembled and pre-mixed and serve as a quality control. Further, the kits can save "weeks of costly and frustrating trouble-shooting".

Therefore, it would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to have packaged the primers Gotoda in kits as taught by Stratagene for the expected benefit of convenience and cost-effectiveness of practitioners in the art wishing to analyze intron 6 TTTA polymorphism of the lipase gene.

6. Claim 97, 98 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zuliani et al (Nucleic Acids Research, Vol. 18, no 16, pg. 4958, 1990) in view of Stratagene (Catalog 1988).

Art Unit: 1655

It is noted, with regard to the limitation that the kits contain instructions for detection of a predisposition for non-responsiveness to treatment with a statin drug, the inclusion of instructions is not considered to provide a patentable limitation on the claims because the instructions merely represent a statement of intended use in the form of instructions in a kit.

Zuilani teaches oligonucleotide primers which amplify intron 6 of the lipoprotein lipase gene which are identical to SEQ ID NO: 33 and SEQ ID NO: 34 (pg. 4958, col. 2). The primers disclosed in Zuilani, 5'- ATCTGACAAGGATAGTGGGATATA-3' and 5'- CCTGGGTAAGTGAAGCGAGACTGTGTC-3' are 100% identical to the primers of the instant claims. Additional SEQ ID NO: 87 and 91 of the instant application overlap the primers of Zuilani.

Zuilani does not specifically teach a genetic testing kit with primers of SEQ ID NO: 33 and 34, nor a genetic testing kit with primers which overlap SEQ ID NO: 87, 91.

However, Stratagene teaches gene characterization kits which help explore identified gene. The kits provide reagents which have been assembled and pre-mixed and serve as a quality control. Further, the kits can save "weeks of costly and frustrating trouble-shooting".

Therefore, it would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to have packaged the primers of Zuilani in kits as taught by Stratagene for the expected benefit of convenience and cost-effectiveness of

Art Unit: 1655

practitioners in the art wishing to analyze intron 6 TTTA polymorphism of the lipase gene.

7. Claims 89 and 95 are rejected under 35 U.S.C. 103(a) as being unpatentable over Glock et al (J. of Forensic Sciences, Vol. 41, no. 4, pg. 579-581, July 1996) or Takagi et al (Molecular and Cellular Probes, Vol. 10, pg. 227-228, 1996) or Zuliani et al (Nucleic Acids Research, Vol. 18, no 16, pg. 4958, 1990) or Ahn (J. of Lipid Research, Vol. 34, pg. 421-428, 1993) in view of Nickerson (Nature Genetics, Vol. 19, no. 3, pg. 233-240, July 1999; Genbank Accession No. AF050163, September 1998).

This rejection encompasses oligonucleotides which amplify part of intron 6. "Consisting essentially of" language is read as open language indicating that the claims are drawn to sequences which contain the SEQ ID NO and any additional nucleotides on either side of the sequence. The intended use in the preamble of product claims carries no patentable weight.

Glock teaches oligonucleotide primers which amplify intron 6 of the lipoprotein lipase gene which are identical to SEQ ID NO: 33 and SEQ ID NO: 34 (pg. 579, col. 2, para. 3). The primers disclosed in Glock, 5'-ATCTGACAAGGATAGTGGGATATA-3' (forward primer- TTTA strand) and 5'-CCTGGGTAAGTGGGACTGTGTC-3' (reverse primer-TAAA) are 100% identical to the primers of the instant claims. Additional SEQ ID NO: 87 and 91 of the instant application overlap these primers.

Art Unit: 1655

Takagi teaches oligonucleotide primers which amplify intron 6 of the lipoprotein lipase gene which are identical to SEQ ID NO: 37 and SEQ ID NO: 38 (pg. 227). The primers disclosed in Takagi, 5'- ATCTGACAAGGATAGTGGGATATA-3' and 5'- CCTGGGTAACTGAGCGAGACTGTGTC-3' are 100% identical to the primers of the instant claims. Additional SEQ ID NO: 87 and 91 of the instant application overlap these primers.

Zuilani teaches oligonucleotide primers which amplify intron 6 of the lipoprotein lipase gene which are identical to SEQ ID NO: 37 and SEQ ID NO: 38 (pg. 4958, col. 2). The primers disclosed in Zuilani, 5'- ATCTGACAAGGATAGTGGGATATA-3' and 5'- CCTGGGTAACTGAGCGAGACTGTGTC-3' are 100% identical to the primers of the instant claims. Additional SEQ ID NO: 87 and 91 of the instant application overlap these primers.

Ahn teaches a primer pair which is designed to amplify a PvuII restriction site in intron 6. The primer pair of Ahn amplifies the newly identified TTTA repeat region.

Niether Glock, Takagi, Zuilani nor Ahn specifically teach all of the primer permutations of the instant claims.

However, Nickerson et al. (herein referred to as Nickerson) teaches the sequence of the human lipoprotein lipase gene. Nickerson also provides two positions for sequence variants within intron 6 of the sequence.

Therefore, it would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to have modified the primers of either Glock,



Art Unit: 1655

Takagi, Ahn, or Zuliani with the teachings of Nickerson. Since the sequence of exon 6, intron 6, as well as the full length LPL gene, was known as provided by Nickerson, the ordinary artisan would have been motivated to amplify the region of intron 6 to detect the disclosed polymorphism. The TTTA polymorphism was known in the art at the time the invention was made. The ordinary artisan would have been motivated to have optimized primer selection within the intron around the TTTA polymorphism to obtain optimal results. Further, in the recent court decision *In Re Deuel* 34 USPQ 2d 1210 (Fed. Cir. 1995), the court determined that the existence of a general method of identifying a specific DNA does not make the specific DNA obvious. Regarding structural or functional homologues, however, the court stated

"Normally, a *prima facie* case of obviousness is based upon structural similarity, i.e., an established structural relationship between a prior art compound and the claimed compound. Structural relationships may provide the requisite motivation or suggestion to modify known compounds to obtain new compounds. For example, a prior art compound may suggest its homologues because homologues often have similar properties and therefore chemists of ordinary skill would ordinarily contemplate making them to try to obtain compounds with improved properties."

Since the claimed primers simply represent functional equivalents of the primer pairs provided by Ahren, Takagi, Zuliani, or Glock, the ordinary artisan would have been motivated to have obtained alternative primers, homologues, for amplification of the known polymorphism within intron 6. Any primer pairs which flank the known polymorphism would serve as functional equivalents of the known primer pairs which flank the polymorphism. Since the full length disclosed nucleic acid sequence of the LPL gene concerning which a biochemist of ordinary skill would attempt to obtain

Art Unit: 1655

alternate compounds with improved properties, the claimed primers are *prima facie* obvious over the cited reference in the absence of secondary considerations.

8. Claims 82-86, 92-93 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gotoda (Journal of Lipid Res. Vol. 33, no. 7, pg. 1067-1072, 1992) or Ahn (J. of Lipid Research, Vol. 34, pg. 421-428, 1993) in view of Nickerson (Nature Genetics, Vol. 19, no. 3, pg. 233-240, July 1999; Genbank Accession No. AF050163, September 1998).

This rejection encompasses oligonucleotides which amplify intron 8 polymorphism HindIII. "Consisting essentially of" language is read as open language indicating that the claims are drawn to sequences which contain the SEQ ID NO and any additional nucleotides on either side of the sequence. The intended use in the preamble of product claims carries no patentable weight.

Gotoda et al. (herein referred to as Gotoda) teaches three DNA polymorphisms in the human lipoprotein lipase gene. Within intron 8, a T-G transversion occurs within a Hind II site. Gotoda also teaches Primer E and Primer F which function to amplify Intron 8. Primer E and Primer F and provided in Table 1 amplify intron 8.

Ahn teaches forward and reverse primers for the explicit purpose of amplifying the sequence around a HindIII restriction site in intron 8. These primers are located in the regions flanking both the 5' and 3' end of the intron. The disclosed forward primer

Art Unit: 1655

corresponds to nucleotides 7724-7744 and the reverse primer to nucleotides 8945-8963 of the Nickerson reference.

Neither Gotoda nor Ahn specifically teach all of the primer permutations of the instant claims.

However, Nickerson et al. (herein referred to as Nickerson teaches the sequence of the human lipoprotein lipase gene. Nickerson also provides five sequence variants within intron 8 of the sequence.

Therefore, it would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to have modified the primers of Gotoda or Ahn with the teachings of Nickerson. Since the sequence of Intron 8, was known, the teachings in Nickerson and Gotoda of polymorphisms in intron 8 would have motivated the ordinary artisan to amplify the region of intron 8 flanking the HindIII polymorphpm. The ordinary artisan would have further been motivated to have optimized primer selection of intron to obtain optimal results. Further, in the recent court decision *In Re Deuel* 34 USPQ 2d 1210 (Fed. Cir. 1995), the court determined that the existence of a general method of identifying a specific DNA does not make the specific DNA obvious. Regarding structural or functional homologues, however, the court stated

"Normally, a *prima facie* case of obviousness is based upon structural similarity, i.e., an established structural relationship between a prior art compound and the claimed compound. Structural relationships may provide the requisite motivation or suggestion to modify known compounds to obtain new compounds. For example, a prior art compound may suggest its homologues because homologues often have similar properties and therefore chemists of ordinary skill would ordinarily contemplate making them to try to obtain compounds with improved properties."

Art Unit: 1655

Since the claimed primers simply represent functional equivalents of the primers of Gotoda and Ahn which amplify the HindIII polymorphism within intron 8. The art provides at least two pairs of primers which function to amplify the HindIII polymorphism, namely the primers of Gota E and F and the primers of Ahn. Any primer pairs which flank the known polymorphism would serve as functional equivalents of the known primer pairs which flank the polymorphism. The full length disclosed nucleic acid sequence of the LPL gene has been provided such that a biochemist of ordinary skill would attempt to obtain alternate compounds with improved properties, the claimed primers are *prima facie* obvious over the cited reference in the absence of secondary considerations.

9. Claims 91 and 96 are rejected under 35 U.S.C. 103(a) as being unpatentable over Paulweber et al (Artherosclerosis, Vol. 86, pg. 239-250, 1991) in view of Oka (Biochim. Biophys. Acta, Vol. 1049, no. 1, pg. 21-26, 1990; Genbank Accession No. X52978, November 1992).

This rejection encompasses oligonucleotides of the 3' UTR region, namely SEQ ID NO: 100-111. "Consisting essentially of" language is read as open language indicating that the claims are drawn to sequences which contain the SEQ ID NO and any additional nucleotides on either side of the sequence. The intended use in the preamble of product claims carries no patentable weight.

Art Unit: 1655

Paulweber et al. (herein referred to as Paulweber) teaches several primers which are used to amplify the 3'UTR region of exon 10 (pg. 242, Figure 1). The position of the primers are provided in Table 2 (pg. 245)

Paulweber does not specifically teach the primer permutations of the instant claims.

However, Oka teaches the 3'UTR region and intron 10. Oka further teaches the gene sequence of exon 10 contains the entire 3' untranslated sequence and the potential polyadenylation sequences are 390 base pairs apart.

Therefore, it would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to have designed primers, as taught by Paulweber, for the 3'UTR region, as taught by Oka, of the lipoprotein lipase gene. Since the sequence of the 3'UTR region was known, as taught by Oka, and the ordinary artisan would have been motivated to amplify the region of the 3'UTR region to detect the region, the gene, or to use the primer in combination with a primer at the most 5' region of the gene for amplification of the entire gene. The ordinary artisan would have further been motivated to have optimized primer selection within the region to obtain optimal results. Further, in the recent court decision *In Re Deuel* 34 USPQ 2d 1210 (Fed. Cir. 1995), the court determined that the existence of a general method of identifying a specific DNA does not make the specific DNA obvious. Regarding structural or functional homologues, however, the court stated

"Normally, a *prima facie* case of obviousness is based upon structural similarity, i.e., an established structural relationship between a prior art compound and the

Art Unit: 1655

claimed compound. Structural relationships may provide the requisite motivation or suggestion to modify known compounds to obtain new compounds. For example, a prior art compound may suggest its homologues because homologues often have similar properties and therefore chemists of ordinary skill would ordinarily contemplate making them to try to obtain compounds with improved properties."

The claimed primers simply represent structural and functional homologues of the full length disclosed nucleic acid sequence of the LPL gene concerning which a biochemist of ordinary skill would attempt to obtain alternate compounds with improved properties, the claimed primers are *prima facie* obvious over the cited reference in the absence of secondary considerations.

10. Claims 97 and 100 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gotoda (Journal of Lipid Res. Vol. 33, no. 7, pg. 1067-1072, 1992) or Ahn (J. of Lipid Research, Vol 34, pg. 421-428, 1993) in view of Nickerson (Nature Genetics, Vol. 19, no. 3, pg. 233-240, July 1999; Genbank Accession No. AF050163, September 1998) as applied to Claims 82-86, 92-93 above and further in view of Stratagene Catalog (1988).

It is noted, with regard to the limitation that the kits contain instructions for detection of a predisposition for non-responsiveness to treatment with a statin drug, the inclusion of instructions is not considered to provide a patentable limitation on the claims because the instructions merely represent a statement of intended use in the form of instructions in a kit.

Neither Nickerson, Gotoda nor Ahn specifically teach a genetic testing kit.

Art Unit: 1655

However, Stratagene teaches gene characterization kits which help explore identified gene. The kits provide reagents which have been assembled and pre-mixed and serve as a quality control. Further, the kits can save "weeks of costly and frustrating trouble-shooting".

Therefore, it would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to have packaged the primers of Gotoda or Ahn in view of Nickerson in kits as taught by Stratagene for the expected benefit of convenience and cost-effectiveness of practitioners in the art wishing to analyze intron 8 HindIII polymorphism of the lipase gene.

11. Claims 98 and 101 are rejected under 35 U.S.C. 103(a) as being unpatentable over Glock et al (J. of Forensic Sciences, Vol. 41, no. 4, pg. 579-581, July 1996) or Takagi et al (Molecular and Cellular Probes, Vol. 10, pg. 227-228, 1996) or Zuliani et al (Nucleic Acids Research, Vol. 18, no 16, pg. 4958, 1990) or Ahn (J. of Lipid Research, Vol. 34, pg. 421-428, 1993) in view of Nickerson (Nature Genetics, Vol. 19, no. 3, pg. 233-240, July 1999; Genbank Accession No. AF050163, September 1998) as applied to Claims 89 and 95 above and further in view of Stratagene (1988).

It is noted, with regard to the limitation that the kits contain instructions for detection of a predisposition for non-responsiveness to treatment with a statin drug, the inclusion of instructions is not considered to provide a patentable limitation on the

Art Unit: 1655

claims because the instructions merely represent a statement of intended use in the form of instructions in a kit.

Neither Nickerson, Glock, Takagi, Ahn nor Zuliani specifically teach a genetic testing kit.

However, Stratagene teaches gene characterization kits which help explore identified gene. The kits provide reagents which have been assembled and pre-mixed and serve as a quality control. Further, the kits can save "weeks of costly and frustrating trouble-shooting".

Therefore, it would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to have packaged the primers of Glock, Takagi, Ahn or Zuliani in kits as taught by Stratagene for the expected benefit of convenience and cost-effectiveness of practitioners in the art wishing to analyze intron 6 of the lipase gene.

12. Claims 99 and 102 are rejected under 35 U.S.C. 103(a) as being unpatentable over Paulweber et al (Artherosclerosis, Vol. 86, pg. 239-250, 1991) in view of Oka (Biochim. Biophys. Acta, Vol. 1049, no. 1, pg. 21-26, 1990; Genbank Accession No. X52978, November 1992) as applied to Claims 91 and 96 above and further in view of Stratagene Catalog (1988).

It is noted, with regard to the limitation that the kits contain instructions for detection of a predisposition for non-responsiveness to treatment with a statin drug, the



Art Unit: 1655

inclusion of instructions is not considered to provide a patentable limitation on the claims because the instructions merely represent a statement of intended use in the form of instructions in a kit.

Neither Oka nor Paulweber specifically teaches a genetic testing kit.

However, Stratagene teaches gene characterization kits which help explore identified gene. The kits provide reagents which have been assembled and pre-mixed and serve as a quality control. Further, the kits can save "weeks of costly and frustrating trouble-shooting".

Therefore, it would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to have packaged the primers of Oka and Paulweber in kits as taught by Stratagene for the expected benefit of convenience and cost-effectiveness of practitioners in the art wishing to analyze the 3'-UTR region of the lipase gene.

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Art Unit: 1655

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

13. Claims 82-86, 89, 92-93, 95, 97-98, 100-101 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 6-10, 13, 18-22, 26, 31-35, 38, 42, 46, 49-53 of U.S. Patent No. 6,297,014. Although the conflicting claims are not identical, they are not patentably distinct from each other. The methods of the '014 patent use the instantly claimed primers. The ordinary artisan would therefore have been motivated to have made the primers such that they may be used in the patented methods. The instantly claimed primers were presented in the parent case and canceled without prejudice to pass the method claims to allowance. Thus, a restriction was never requested.


### **Conclusion**

14. No claims allowable over the art.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner Jeanine Enewold Goldberg whose telephone number is (703) 306-5817. The examiner can normally be reached Monday-Thursday from 7:00AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Jones, can be reached on (703) 308-1152. The fax number for this Group is (703) 305- 3014.

Any inquiry of a general nature should be directed to the Group receptionist whose telephone number is (703) 308-0196.

Jeanine Enewold Goldberg  
January 10, 2002 

  
W. Gary Jones  
Supervisory Patent Examiner  
Technology Center 1600